

BIBLIOGRAPHICAL RECORD.

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A colour after initial designates the most common given name, as: A: Augustus; B: Benjamin; C: Charles; D: David; E: Edward; F: Frederic; G: George; H: Henry; I: Isaac; J: John; K: Karl; L: Louis; M: Mark; N: Nicholas; O: Otto; P: Peter; R: Richard; S: Samuel; T: Thomas; W: William. The initials at the end of each record, or note, are those of the recorder.

Corrections of errors and notices of omissions are solicited.

Lubbock, J.: On flowers and insects. (LUBBOCK, J.: Scientific lectures, Lond. and N. Y., *Macmillan*, 1879, p. 1-30, fig. 1-30.)

Treats of the cross-fertilization of plants and the modes by which it is accomplished; rapidity of visits of wasps and bees in collecting honey; color sense in bees.

G: D. (3434)

Lubbock, J.: On the habits of ants. (LUBBOCK, J.: Scientific lectures, Lond. and N. Y., *Macmillan*, 1879, p. 68-96, fig. 45.)

Treats of the metamorphoses, food, domesticated *aphides* and other insects in the nest, enemies and modes of warfare, industry, longevity, association with one another, slavery, division of labor, intelligence, engineering, recollection of associates, smell, hearing, sight, and communities of ants.

G: D. (3435)

Lubbock, J.: On the habits of ants: *continued*. (LUBBOCK, J.: Scientific lectures, Lond. and N. Y., *Macmillan*, 1879, p. 97-137, fig. 46-51.)

Treats of the absence of affection for one another, recognition of associates, hatred of strangers, agricultural skill (exemplified by *pogonomyrmex barbatus*), cooperation, power of communication (compared with that of bees and wasps), power and mode of finding their way (compared with that of bees and wasps), ability or absence of ability to produce and hear sounds, and power of discriminating colors, of ants, ending with a comparison of the advancement among different kinds of ants to "the three great phases: the hunting, pastoral and agricultural stages, in the history of human development."

G: D. (3436)

Lubbock, J.: On plants and insects. (LUBBOCK, J.: Scientific lectures, Lond. and N. Y., *Macmillan*, 1879, p. 31-67, fig. 31-44.)

Treats of the use of honey by plants as an attraction for flying insects, in order to secure cross-fertilization, and as an attraction for ants, to act as protectors for the plant; structures to keep ants out of flowers; modifications of insects to imitate plants, and thus escape enemies; forms and colors of larvae do not depend upon those of the mature insect, but upon larval habits; richness of adaptive modifications illustrated by a brief description of the transformations of *sitaris*; protective coloration of lepidopterous larvae, especially of *sphinxidae*. [Most of the facts in regard to the larvae of *sphinxidae* are, according to author (p. 52), from Weismann's "Studien zur descendenz-theorie." 4.]

G: D. (3437)

Lubbock, J.: Scientific lectures. Lond. and N. Y., *Macmillan & co.*, 1879. 12+188 [+adv.] p., il.; 1, pl., 23X14.5, t 17X9.8. cl., \$2.50.

Notice. (*Nation*, 16 Oct. 1879, v. 29, p. 262.)

Rev. (*Westminster rev.* [Amer. ed.], Oct. 1879, p. 287-288, 48 cm.)

Rev. (*Amer. journ. sci. and arts*, Nov. 1879, s. 3, v. 18, p. 418.)

Rev. by A. R. W[allace], entitled "Lubbock's Scientific lectures." (*Nature*, 7 Aug. 1879, v. 20, p. 335-336, 38 cm.)

Contains six lectures, by author, with following titles, *which see*:—1. On flowers and insects [Rec., 3434], p. 1-30.—2. On plants and insects [Rec., 3437] p. 31-67.—3. On the habits of ants [Rec., 3435], p. 68-96.—4. On the habits of ants: *continued* [Rec., 3436], p. 97-137.—5 and 6 [not entomological]. G: D. (3438)

Müller, Hermann. Die bedeutung der honigbiene für unsere blumen. [No. 1-9.] (*Eichstädter bienenzeitung*, 1875, v. 31: 15 Apr., p. 81-82; 15 May, p. 102-104; 31 May, p. 109-111; 15 June, p. 122-125; 15 July, p. 138-141; 31 July, p. 165; 1876, v. 32: 31 Jan., p. 20-22; 1 June, p. 119-123; 15 July, p. 176-184.)

Abstract of nos. 8-9, by H. Müller, under full title. (*Bot. jahresbericht* . . . Just, 1876, v. 4, p. 946, 7 cm.)

A series of nine articles, as follows: 1. The Sprengel-Darwinian theory of flowers. 2. The adaptation of *lanius albun* to *bombus*. 3. The mutual adaptations of *bombus* and flowers which it visits. 4. The gradual development of the pollen-baskets of *apis*. 5. Gradual correlated increase in the care for their young, and in the pollen-bearing efficiency of *leucocryptinae*, *cyphidae*, *ichneumonidae* and *sphingidae*. 6. The care of certain *sphingidae* (*pompilus*) for their young. 7. What bees have inherited from lower hymenoptera, and what they have acquired for themselves. 8. Statistical comparison of the floral activity of lower hymenoptera. 9. Statistical comparison of the floral activity of the lower and higher bees. H: M. (3439)

Müller, Hermann. Die stellung der honigbiene in der blumenwelt. 1. (*Bienenzeitung*, 15 Jan. 1882, jahrg. 38, p. 22-24.)

Records the visits of *apis mellifica* to anemophilous flowers. H: T. (3440)

Ormerod, Eleanor A. Effects of warmth and surrounding atmospheric conditions on silkworm larvae. (*Entomologist*, June 1882, v. 15, p. 127-129.)

Experiments upon the effects of temperature and moisture in rearing *bombyx mori*. *G: D.* (3441)

P[ackard], A[lpheus] S[pring, jr.]. The insects of May. (*Amer. nat.*, May 1867, v. 1, p. 162-164, 3 fig.)

Figures *carpocapsa pomonella*, *phyllobrotica vittata*, and *conotrachelus nemphar*, and gives brief notes on many other insects. *G: D.* (3442)

Osten Sacken, C: Robert. Dimorphism of female *blepharoceridae*. (*Entom. mo. mag.*, Feb. 1881, v. 17, p. 206.)

Notice of private letter from F. Müller, proving "three facts, new to the student of *blepharoceridae*: 1, that male and female do not always have the head and the front of the same structure; 2, that some species may have two forms of females; 3, that one of these forms has the organs of the mouth built upon a plan different from the type hitherto described as peculiar to the female." *B: P. M.* (3443)

Patton, W: Hampton. Description of the species of *macrofis*. (*Entom. mo. mag.*, July 1880, v. 17, p. 31-35.)

Describes *macrofis ciliata* n. sp., and *m. patellata* n. sp., and varieties of the former; remarks upon the criteria of species in this genus, and upon the distinctness of the forms hitherto described as separate species in Europe. *B: P. M.* (3444)

Reuter, Odo Moraunal. Diagnoses quatuor novarum pentatomidarum. (*Entom. mo. mag.*, Mch. 1881, v. 17, p. 233-234.)

Describes 2 new species of *carbula* from the Amur and China, *edessa fuscidorsata* n. sp. from Mexico and Bogota, and *aspongopus nigroaeneus* n. sp. from Siam. *B: P. M.* (3445)

[Riley, C: Valentine.] Galls on supposed dock. (*Amer. entom. and bot.*, May 1870, v. 2, p. 212, 4 cm.)

Gelechia gallae-solidaginis forms galls on stems of *solidago*; *gastrophysa cyanea* breeds on *rumex*. *B: P. M.* (3446)

[Riley, C: Valentine.] Raspberry gouty gall. (*Amer. entom.*, Feb. 1870, v. 2, p. 128, 11 cm., fig. 90.)

Ravages of and means against *agrilus ruficollis*; description and figure of larva. *B: P. M.* (3447)

[Riley, C: Valentine.] Raspberry root-gall. (*Amer. entom. and bot.*, Apr. 1870, v. 2, p. 181, 13 cm., fig. 110.)

Description and figure of gall of *rhodites radicum*, occurring on roots of *rosaceae* and especially of *rosa*; genera of parasites raised from it; interest of the question of the manner and extent of parasitization of this gall. *B: P. M.* (3448)

[Riley, C: Valentine.] Rose-gall and pupa of archippus butterfly. (*Amer. entom. and bot.*, Sep. 1870, v. 2, p. 307, 7 cm., fig. 189.)

Figure of pupa of *danais archippus*; brief descriptions of three undetermined species of galls on rose-leaf, doubtless all formed by *rhodites*. *B: P. M.* (3449)

Riley, C: Valentine. The solidago gall moth: *gelechia gallusolidaginis*, n. sp. (1st ann. rept. state entom. Mo., [Mch.] 1869, p. 173-178, fig. 90-97; pl. 2, fig. 1-2, 5-9.)

Occurrence of galls of *trypeta (acinia) solidaginis* on stems of *solidago nemoralis*; description and figures of gall, larva and imago of *gelechia gallusolidaginis* and of imagos of *pirene?* n. sp., *eurytoma bolteri* n. sp., and *hemiteles? cressonii* n. sp.; description of imago of *microgaster gelechiæ* n. sp., and mention of *pimpla* n. sp. and *ephioltes* n. sp., all these being parasites on the *gelechia*; seasons, habits, food-plants [*solidago* spp.] and geographical distribution of the *gelechia*, and habits of the *pirene?*, *hemiteles?* and *microgaster* and of an introducing larva perhaps of *oberea* sp.; comparison of the *gelechia* and its gall with *cochylis hilarana* and its gall on *artemisia campestris* in France. *B: P. M.* (3450)

[Riley, C: Valentine.] The trumpet grape-gall. *Vitis viticola*, O. S. (*Amer. entom.*, Feb. 1870, v. 2, p. 113-114, 19 cm., fig. 76.)

Reprint of figure of gall figured in [B: D. Walsh and C: V. Riley's] "The trumpet grape-gall" (*op. cit.*, Sep.-Oct. 1869, p. 28) [Rec., 3353], fig. 27, under the name of *vitis-tiliaus*; this gall previously described as that of *cecidiomyia viticola*; occurrence of similar gall in England, on *tilia* probably caused by mites. *B: P. M.* (3451)

[Walsh, B: Dann and C: Valentine Riley.] An apple growing on a grape vine. (*Amer. entom.*, Oct. 1868, v. 1, p. 28, 12 cm.)

Extract from *Richmond* [Va.] *whig*, with criticism; a gall of *cecidiomyia vitis-pomum* mistaken for an apple growing on a grape-vine. [Further accounts of the same given in (authors')] "The apple growing on a grape vine" (*op. cit.*, Nov. 1868, p. 54) (Rec., 3453, and in (authors')] "Galls and their architects" (*op. cit.*, Feb. 1869) (Rec., 3349), p. 106.] *B: P. M.* (3452)

[Walsh, B: Dann and C: Valentine Riley.] The apple growing on a grape vine. (*Amer. entom.*, Nov. 1868, v. 1, p. 54, 7 cm.)

The "vegetable phœnomenon" described in (authors')] "An apple growing on a grape vine" (*op. cit.*, Oct. 1868, p. 28) [Rec., 3452] proved to be a gall [described and figured as that of *cecidiomyia vitis-pomum* n. sp., in (authors')] "Galls and their architects" (*op. cit.*, Feb. 1869) (Rec., 3349), p. 100.] *B: P. M.* (3453)

[Walsh, B: Dann and C: Valentine Riley.] Oak-leaf gall. (*Amer. entom.*, Sep.-Oct. 1869, v. 2, p. 29, 22 cm.)

Description of galls of *cecidiomyia quercus-pilulacæ* and *c. q.* [*P.-symmetrica*]; occurrence of *cynipidae* as guests in galls of *cecidiomyiidae*; difference between larvae of *cynipidae* and *cecidiomyiidae*; transformations of *cecidiomyia q.-pilulacæ* and of the *cynips* inquilinous in its gall; distinction of the annual and biennial groups of *quercus* and of the galls occurring on trees of the one or the other group. *B: P. M.* (3454)